February 14, 2003

Andrew Fanara
EPA Program Manager
ENERGY STAR for Exit Signs
United States EPA
1200 Pennsylvania Ave., NW
MC 6202J
Washington, DC 20460

Subject: ENERGY STAR Program Requirements for Exit Signs
Draft 2-Eligibility Criteria – Version 3.0

Dear Mr. Fanara:

Thank you for the opportunity to comment on the subject document.

In general, we believe the Energy Star Program for Exit Signs has been very beneficial to the public because it required a high level of performance (visibility) to go along with energy efficiency. As you know, Lithonia worked very hard to make as many of our exit signs meet these requirements as possible, within reasonable additional costs. EPA recognized this by awarding us the Energy Star Partner of the Year award. We did all of this work, not to earn an award, but because we believed, and still believe, that a minimum luminance of 15 cd/m^2 is needed to see an exit sign quickly enough to exit a building expeditiously. EPA even required this minimum luminance at a 45 deg angle when neither UL nor CSA did. Our exit signs bear the Energy Star mark without a cost adder.

Now EPA is proposing to drop all minimum luminance requirements and simply require the exit sign to be listed to UL 924 which also has no minimum luminance requirements. Exit sign visibility is determined by an Observation Visibility Test that has no substantial scientific backing, is very controversial and subjective, and is being used for a purpose for which it was never intended. UL has informed NFPA that using UL 924 (revised July 11, 2001) would result in exit signs that would be significantly less visible than signs that were previously listed. Now exit signs are not required to be visible at 45 degrees.

EPA's Energy Star Program for Exit Signs is being changed from requiring a very visible exit sign with good energy efficiency at a reasonable cost to allowing the use of exit signs that are not legible unless the observer's eye is allowed to adapt to total darkness for 5 minutes prior to the viewing. The observer must have minimum 24/40 visual acuity with good color vision. With these requirements, there is no safety margin needed by people with even slightly impaired vision or in a state of panic. Also, this does not take into account the special lighting needs of the elderly population, which is expected to double between 1995 and 2030, as addressed in the "Recommended Practice for Lighting and the Visual Environment for Senior Living – RP-28-98" prepared by the Illuminating Engineering Society of North America.

We strongly disagree with dropping minimum luminance requirements.

You are proposing to drop the requirement that an exit sign must contain an integral light source. This complicates the inspection authority's job because when a photoluminescent (PL) sign is used, he must try to make sure that adequate light for charging the PL sign is provided. In many buildings, it will be argued that ambient lighting is adequate for charging. In some cases, this may

be true, but we have measured a lot of exit sign applications where this is not true. Also, this means the lighting fixtures that provide ambient light can not be moved or changed unless precautions are taken to provide adequate light for charging the PL signs. Who is going to be responsible for this, and the answer is no one.

We strongly disagree with dropping the requirement that an exit sign must contain an integral light source.

You are proposing to drop the maximum wattage from 5 watts per sign to 3 watts per sign. For LED exit signs, this will force the manufacturers to reduce LED current which will result in signs that are less bright than ones on the market today. Also, it will generally eliminate transformers in LED signs.

We strongly disagree with dropping the maximum wattage from 5W to 3W per sign.

We strongly agree with allowing any leading power factor because this helps offset the building's overall lagging power factor.

If other requirements are being reduced to minimums, we do not believe there is a need for requiring a minimum 5-year warranty on these products because this has nothing to do with energy usage. There are no requirements for substantiation of this claim, and 5 years is a long time to wait to determine compliance.

We believe an effective date of at least 12 months from date of final publication is needed for manufacturers to comply with these new requirements.

With these changes in requirements, it is difficult to see any useful purpose for the ENERGY STAR mark on an electrical exit sign. Almost all of these signs on the market today already carry an NRTL mark showing compliance with UL 924, and they are marked with the input wattage so it is very easy to visually determine compliance. If the proposed requirements go into effect, the only benefit will be the reduction in wattage from 5 watts per sign to 3 watts per sign. This is not a significant benefit to a governmental program of this magnitude.

Sincerely,

Billy G. Helton
Manager, Engineering Services

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